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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,392	02/04/2004	Nobuyuki Hiratsuka	1538.1046	2748

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EXAMINER

BELL, CORY C

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/770,392	Applicant(s) HIRATSUKA ET AL.	
	Examiner Cory C. Bell	Art Unit 2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-21 have been examined.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 5, 8, 10, 12, 15, 17, and 19 are rejected under 35 U.S.C. 103(a) as being obvious over EAST Text Searching, published January 2000, known hereafter as East, in view of US 5,220,625 known hereafter as Hatakeyama.

2.1. *As per claim 1,*

1. A search method comprising:

specifying a search word included in a search condition designated by a user; (*East Page 45 BRS window; Hatakeyama, Figures 6-12*)

extracting a synonym of said search word from a synonym file; (*East page 18 "Include synonyms" and selection of the preferred thesaurus*)

obtaining evaluation data of said search word, which that-is at least either of a score

based on an appearance frequency of said search word and a number of documents

including said search word (*East page 45 Search terms and total, the user entered search words are search terms*) and evaluation data of the extracted synonym, which is at least

either of a score based on an appearance frequency of said extracted synonym and

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a number of documents including said extracted synonym (East Page 45, the extracted synonyms are implicitly search terms, however this is not expressly disclosed; However, Hatakeyama Col 14 expressly states included synonyms being added to the search as search terms. Thus, it would have been obvious to one of ordinary skill in that art to include the extracted synonyms in the search terms and calculate their evaluation data as is done with other search terms in East to provide that advantage of knowing which terms are most effective and which should be abandoned)

presenting said user with both of said search word and said extracted synonym, along with said evaluation data of said search word, and said the evaluation data of said

extracted synonym in a manner in which said search word and synonym are selectable;

(East Page 45 teaches displaying the evaluation data for term in a search string;

Hatakeyama teaches including extracted synonyms in the search string in Col 14. Thus, it would have been obvious to one of ordinary skill in that art to include the extracted synonyms in the search terms and calculate their evaluation data as is done with other search terms in East to provide that advantage of knowing which terms are most effective and which should be abandoned)

receiving data representing a search word presented in said presenting and selected by said user responsive to said presenting, or data representing a synonym presented in said presenting and selected by said user responsive to said presenting; and

(East page 45 shows term 1 Toyota is selected which is inherently responsive to said presenting as the term cannot be selected until it is presented; Hatakeyama, col 14 lines 40-45 teaches the user being able to select and abandon synonyms) and

presenting said user with data concerning an identified document including the

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selected search word or its the selected synonym. (East Page 101 browse; Hatakeyama, Figure 24)

2.2. As per claim 3,

3. The search method as set forth in claim 1, wherein said extracted synonym is a term other the said search condition designated by said user, (Hatakeyama, Col 14 teaches the terms being expanded after the user inputs his search condition) said obtaining evaluation data comprises: counting either of said number of documents including said search word and said number of documents including said extracted synonym (See Claim 1 rejection, the corresponding 1 number and hits tally and generated by searching the documents see east pages 45 and 101)

2.3. As per claim 5,

5. The search method asset forth in claim 1, wherein said first presenting comprises: judging whether or not said evaluation data of said search word and its synonym satisfies a predetermined condition; and presenting said user with said search word or its synonym whose evaluation data satisfies said predetermined condition in a state indicating being pre-selected and said search word or its synonym whose evaluation data does not satisfy said predetermined condition in a state indicating being unselected. (East page 18 shows including synonyms, having a predetermined condition of being located in the Thesaurus; Hatakeyama Figure 7 Shows the menu of search conditions that the user can predetermine for search terms and Col 17 Lines Teaches highlighting the search terms that have been pre-selected as they satisfy the predetermined condition. Thus, it would have been obvious to one or

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ordinary skill in the art at the time of the invention to include this feature to allow the user to quickly find the terms desired.)

2.4. *As per claim 8,*

See Claim 1 rejection.

2.5. *As per claim 10,*

See Claim 3 rejection.

2.6. *As per claim 12,*

See Claim 5 rejection.

2.7. *As per claim 15,*

See Claim 1 rejection.

2.8. *As per claim 17,*

See Claim 3 rejection.

2.9. *As per claim 19,*

See Claim 5 rejection.

3. Claims 2, 6, 7, 9, 13, 14, 16, 20, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over EAST and Hatakeyama in view of US 5692176, known hereafter as Holt.

3.1. *As per claim 2, 9, and 16,*

EAST teaches the claims upon which claims are dependant, but fails to expressly disclose the limitations of claims 2, 9, and 16; however, they are taught by HOLT as follows:

The search method as set forth in claim 1, wherein said specifying comprises extracting a search word from a sentence input as said search condition by a morphological analysis.

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Col 2 lines 10-20, and Figure 7 shows the search description being a sentence, Col 10-11 teaches performing further the term extraction)

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to include this feature in order to provide the user with more entry options and thus make the system easier to use and usable by a wider range of users.

3.2. *As per claim 6, 13, and 20,*

EAST teaches the claims upon which claims are dependant, but fails to expressly disclose the limitations of claims 2, 9, and 16; however, they are taught by HOLT as follows:

6. The search method as set forth in claim 1, wherein said predetermined condition is a condition in which said number of documents including said search word or its synonym is lower than a first threshold, (Col 6 lines 41-54) or a condition in which said score based on said appearance frequency for said search word or its synonym exceeds a second threshold.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to include this feature due to the advantage of improving the search results.

3.3. *As per claim 7, 14, and 21,*

EAST teaches the claims upon which claims are dependant, but fails to expressly disclose the limitations of claims 7, 14, and 21; however, they are taught by HOLT as follows:

7. The search method as set forth in claim 1, wherein said second presenting comprises: counting for each of said documents a third appearance frequency of said search word or a third appearance frequency of said selected synonym, in said identified document; and

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presenting said user with said data concerning said documents in order of values calculated by using said third appearance frequency of said selected search word or said third appearance frequency of said selected synonym . (Col 1 lines 60-67 “then ranks each document using a ranking formula that varies according to the square of the term frequency of each of the search terms in the document)

Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to include this feature in order to provide ranked results that aid in quickly finding the best results.

1. Claims 4, 11, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over EAST and Hatakeyama in view of US 5692176, known hereafter as Holt. and in view of US 2004/0068396 known hereafter as Kawatani.

3.4. *As per claims 4, 11, and 18,*

EAST teaches the claims upon which claims are dependant, but fails to expressly disclose the limitations of “a sentence input as said search condition”; however, this is taught by HOLT as shown above. Although, both EAST and HOLT fail to expressly disclose all the limitations the limitation not taught by HOLT and EAST are taught by Kawatani as follows: counting a second appearance frequency of said search word in a sentence input as said search condition; (HOLT teaches the input of a sentence and using Morphological Analysis on that sentence, Kawatani teaches Morphological analysis including calculating term frequency in the data to be analyzed in para 2)

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and calculating said score based on said appearance frequency by using said second appearance frequency of said search word and said first appearance frequency of each of said search word and said score based on said appearance frequency of said extracted synonym by using said second appearance frequency of said search word and said first appearance frequency of said extracted synonym. (First, this limitation is non-limiting as it is a modification of an optionally recited limitation in the preceding claims.

SEE MPEP 2106, Section II C:

The subject matter of a properly construed claim is defined by the terms that limit its scope. It is this subject matter that must be examined. As a general matter, the grammar and intended meaning of terms used in a claim will dictate whether the language limits the claim scope. Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.

Second, Para 2 teach using this feature to provide a weight for each term in use with ranking and col 1 line 60 – col 2 line 9 of HOLT teaches using document frequency for ranking)

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to include this feature in order to proved the user with more entry options and thus make the system easier to use and usable by a wider range of users and to provide better ranked result to aid in the location of the appropriate documents.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The attached sheet shows Kawatani's priority to PCT/US01/45599 filed 11/15/2001.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cory C. Bell whose telephone number is (571) 272 2736. The examiner can normally be reached on m-f 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272 4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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